said quench openings of the first platen movable therewith during the deformation of the platen;

a second platen having quench openings throughout the extent thereof and opposing the first platen in spaced relationship with the glass sheet therebetween;

said actuator being constrainable and having the ability to lift portions of said first platen a controlled distance to form the desired bent shape in the glass sheet; and

means for supplying quenching gas [being supplied] to the quench openings of both platens and thereby to both sides of the glass sheet to temper the bent glass sheet between the platens.

A glass bending and tempering apparatus comprising:

a first platen for receiving a heated glass sheet to be bent;

said first platen being deformable and including an actuator for deforming said platen from a planar shape to a bent shape;

said first platen including quench openings throughout the extent thereof;

said quench openings of the first platen movable therewith during the deformation of the platen;

a second platen having quench openings throughout the extent thereof and opposing the first platen with the glass sheet therebetween;

a support mounting said platens at upper and lower locations with respect to each other;

said actuator being constrainable and having the ability to lift portions of said first platen a controlled distance to form the desired bent shape in the glass sheet; said lower platen including deformable drive shafts, drive wheels mounted on the drive shafts to engage the heated glass sheet and provide movement thereof during platen deformation

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that provides the bending, and quench tubes that define the quench openings of the lower platen and rotatably support the drive shafts thereof such that the drive wheels move the heated glass sheet during the bending and quenching;

said upper platen including idler shafts, idler wheels mounted on the idler shafts to engage the heated glass sheet and to rotate with movement of the glass sheet, and quench tubes that define the quench openings of the upper platen and rotatably support the idler shafts; and

means for supplying quenching gas [being supplied] to the quench openings of both platens and thereby to both sides of the glass sheet to temper the bent glass sheet between the platens.

16. (Amehded) A glass bending and tempering apparatus comprising:

a first platen for receiving a heated glass sheet to be bent;

said first platen being deformable and including an actuator for deforming said platen from a planar shape to a bent shape;

said first platen including quench openings throughout the extent thereof;

said quench openings of the first platen movable therewith during the deformation of the platen;

a second platen having quench openings throughout the extent thereof and opposing the first platen with the glass sheet therebetween;

a support mounting said platens at upper and lower locations with respect to each other;

said second platen including an actuator for raising and lowering said second platen with respect to said first platen;

at least one template mounted above said upper platen;

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said second platen being pressed against said template as the first platen is deformed from a planar shape to a bent shape to bend the heated glass sheet thereagainst said second platen;

said second platen conforming to said template;

said lower platen including deformable drive shafts, drive wheels mounted on the drive shafts to engage the heated glass sheet and provide movement thereof during platen deformation that provides the bending, and quench tubes that define the quench openings of the lower platen and rotatably support the drive shafts thereof such that the drive wheels move the heated glass sheet during the bending and quenching;

said upper platen including idler shafts, idler wheels mounted on the idler shafts to engage the heated glass sheet and to rotate with movement of the glass sheet, and quench tubes that define the quench openings of the upper platen and rotatably support the idler shafts; and

means for supplying quenching gas [being supplied] to the quench openings of both platens and thereby to both sides of the glass sheet to temper the bent glass sheet between the platens.

- 17. (Amended) Glass tempering apparatus comprising: first and second deformable platens each of which has quench openings that move [therewith] with the platens during deformation [thereof]; [and] the first and second deformable platens opposing each other to receive a bent glass sheet therebetween; and means to supply quenching gas through the quench openings to temper the bent glass sheet.
- 18. (Amended) Class bending and tempering apparatus comprising: a pirst deformable platen including a deformable quench portion for receiving a heated glass sheet; said deformable quench portion having quench openings that move [therewith] with the platens during the deformation of

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the quench portion [thereof]; a second deformable platen having a deformable quench portion having quench openings that move [therewith] with the platen during deformation [thereof] of the quench portion; [and] the quench portions of the first deformable platen and the second deformable platen opposing each other with a bent glass sheet therebetween; and means to supply quenching gas through the quench openings to temper the bent glass sheet.

Class bending and 19. (Amended) apparatus comprising: a first deformable platen for receivsing a heated glass sheet to be bent; an actuator for deforming the first platen from a planar shape to a bent shape; said first platen including a deformable quench portion having quench openings that/move [therewith] with the platen during deformation [thereof] of the quench portion; a second deformable platen having 🛊 deformable quench portion having quench openings that move [therewith] with the platen during deformation [thereof] of/the quench portion; [and] the quench portion of the first/deformable platen and the second deformable platen opposing each other with the bent glass sheet received therebetween; and means to supply quenching gas through the quench openings to temper the bent glass sheet.

20. (Amended) Apparatus for bending and tempering glass sheets comprising:

[an over for heating flat glass sheets into a hot, soft, bendable condition,

load conveyor means having rollers for transporting a glass sheet into the oven,

power means connected to the load conveyor rollers for rotating them,]

[quench means including] upper quench tubes arranged in longitudinal rows which are spaced apart and

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defining an upper platen [across the width of the quench
section],

[the quench means also including] lower quench tubes arranged in longitudinal rows which are spaced apart and defining a lower platen [across the width of the quench section],

each longitudinal row of lower quench tubes being supported on a support [bar that extends lengthwise in the quench section],

[quench] rollers [in the quench section] rotatably mounted [in longitudinal rows] between pairs of lower quench tubes for transporting the glass sheet [in the quench section],

power means connected to the [quench] rollers for rotating them,

means connected to the lower support [bar in the quench section] for moving the lower support [bars] to change the vertical position of the lower quench tubes, whereby the glass sheet is bent, and the [quench] rollers to a quench position where the lower quench tubes and the quench rollers have the same contour as the bent glass sheet, and

means connected to the upper support [bars in the quench section] for moving the upper support [bars] to change the vertical position of the upper quench tubes to a quench position where the upper quench tubes have the same contour as the bent glass sheet[,

cooling section rollers in the cooling section for transporting the quenched glass sheet in the cooling section, and

power means connected to the cooling section rollers for rotating them].

## **Remarks**

The application specification includes revisions to provide correspondence with the claims and to correct

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